

What is claimed is:

1. A method for generating a color match between a target object having a plurality of different target color values and a source object, the method comprising the steps of:

a) generating for the target object a target color space with target color locations to be correlated with target color values;

b) generating for the source object a source color space having a plurality of source color locations, wherein the source color locations are correlated with a source color value, respectively;

c) determining for each target color location within the source color space a position in the vicinity of a similar source color location;

d) determining the spacing of the position of the target color location from the similar source color location; and

e) based on the spacing, changing the source color value correlated with the similar source color location.

2. The method according to claim 1, further comprising the step of repeating the steps b) through e) until either a predetermined number of repetitions has been reached or the spacing drops below a predetermined error value.

3. The method according to claim 2, wherein, beginning with a first repetition of the steps b) through e), the source color locations of the source color spaces determined in the preceding repetition or preceding repetitions are used.

4. The method according to claim 3, wherein the source color spaces of all preceding repetitions are used.

5. The method according to claim 1, wherein several of the source color locations are determined for the target color location, wherein the source color locations envelopes the target color location, wherein one of the source color locations is the similar source color location.

6. The method according to claim 5, wherein from the source color locations enveloping the target color location a linear combination with linear factors is formed and the linear factors are used for changing the source color value corresponding to the similar source color location.

7. The method according to claim 1, further comprising the step of determining a black content when generating the target color space and the source color space.

8. The method according to claim 1, further comprising the step of representing the color values as a four-dimensional field and the color space as a three-dimensional field, respectively, when the black content is not considered.

9. The method according to claim 1, further comprising the step of representing the color values as a four-dimensional field and the color space as a four-dimensional field, respectively, when the black content is considered.

10. The method according to claim 1, wherein the target color locations and the source color locations are determined based on the target color values and the source color values by a spectroscopic method, respectively.